AIR MONITORING PLAN

A.H. Heat Treat Site
Clifton, New Jersey

Prepared for:

U.S. Environmental Protection Agency
Region 2
2890 Woodbridge Avenue
Edison, New Jersey 08837

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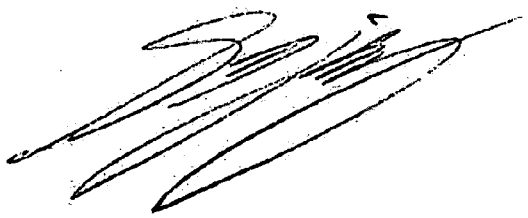

Sean Liddy, CHST
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May 19, 2009
Date

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1.1 STATEMENT OF WORK

This Air Monitoring Plan outlines monitoring strategies and analytical methods, which can be used to assess personnel exposure and ambient air exposure to asbestos and lead hazards during environmental services at the A.H. Heat Treat Site in Clifton, New Jersey. Monitoring will consist primarily of evaluating personnel exposures to asbestos and heavy metals while workers perform site activities to include:

1) Drum handling
2) Building decontamination

Sampling procedures in accordance with NESHAP, 29 CFR 1910.1001 and 29 CFR 1926.1101 for asbestos and 29 CFR 1910.1025 and 29 CFR 1926.62 for lead.

1.2 AIRBORNE CONTAMINANT EVALUATIONS

To quantify potential worker exposure concentrations of airborne asbestos and metals that may be released while workers are setting up site and during drum handling and building decontamination activities. Monitoring will be accomplished in the worker's breathing zones (BZ) throughout a representative work shift (between 4 – 12 hours). Quantitative and qualitative monitoring will be conducted under the direction of an AECOM Technical Services Certified Industrial Hygienist or AHERA accredited air sampling technician using the instrumentation and methods specified in Tables 1-1 and 1-2.

TABLE 1-1 AIR MONITORING SPECIFICATIONS

INSTRUMENT TYPE	EQUIPMENT MANUFACTURER	TARGET STRESSOR
A) Personal monitoring pumps (battery operated) calibrated to an appropriate flow rate of 2.0 liters per minute equipped with sampling cartridge listed in the applicable NIOSH Method 7400 (asbestos) & 7300 (metals) (attached). 1. The BZ cartridges will be attached directly to the work uniform near/on the lapel. **B)** High volume area pumps for background sampling and ambient air sampling (area sampling). Samples must be taken in 4ft – 6ft. range.	SKC, MSA, Glian (or equivalent).	1. Asbestos 2. Metals

1.2.1 Personal Monitoring

Measurement of employee exposure to asbestos fibers and heavy metal particles will be performed at the discretion of the AHERA accredited air sampling technician and Safety Professional during the site set-up activities. Monitoring techniques will also be determined by the safety professional, and will conform to applicable Occupational Safety and Health Administration (OSHA), and/or National Institute for Occupational Safety and Health (NIOSH) sampling methods. Samples will be collected under the direction of a AHERA accredited air sampling technician. An Analytical Laboratory accredited by the American Industrial Hygiene Association (AIHA) and participant in the AIHA Proficiency Analytical Testing (PAT) program, shall perform the analysis.

1.2.2 Area Sampling

Area air samples will be taken for background sampling, during work area preparation, and container handling activities.

1.3 MAINTENANCE AND CALIBRATION OF EQUIPMENT

All monitoring equipment will be maintained and calibrated in accordance with applicable manufacturer recommendations. All pertinent data will be logged in a health and safety logbook (or equivalent) and maintained on site for the duration of site activities. Calibration of all monitoring equipment will be performed daily per the equipment manufacturer recommendations.

Where personal sampling is performed, the AECOM Technical Services Health & Safety Department will be responsible for informing employees and subcontractors of their monitoring results to comply with OSHA regulations and good occupational health practices. Within five working days after the receipt of monitoring results, the Health & Safety Department will notify each employee of the results, which represent that employee's exposure.

Whenever the results indicate that employee exposure exceeds the permissible exposure limits (PEL), notification shall be provided to affected employee stating that the permissible exposure limit was exceeded and providing a description of the corrective action taken to reduce exposure to a level below the PEL. Results of monitoring for other hazardous and harmful physical agents shall also be reported to employees in the same manner.

TABLE 1-2 TARGET STRESSOR INFORMATION

TARGET STRESSOR	NIOSH	SAMPLE MEDIA	RECOMMENDED FLOW RATES	OSHA PEL[c]
Asbestos	NIOSH 7400 (attached)	(.8-um pore size, cellulose ester membrane, 25-mm)	2.0 LPM for 4-8 hours for personal monitoring Minimum of 2.0 LPM for duration of shift for area sampling and maximum of 16 LPM. **(refer to Step 4 of NIOSH 7400 for sample volumes based on site conditions)**	0.1 f/cc
Metals	NIOSH 7300 (attached)	0.8 micron mixed cellulose ester, 37 millimeter diameter filter(s)	1.0-4.0 lpm/50-2000L (volume)	Lead - 0.05 mg/m^3

a - National Institute for Occupational Safety and Health
b– Liters per minute
c – Permissible exposure limit

2.0 LABORATORY SAMPLE ANALYSIS AND REPORTING

All samples will be collected in the breathing zone of the workers. Persons sampled, tasks performed, duration, volumes and laboratory results will be provided in a letter report format within four weeks of receiving the sample analysis results. Sampling and analyses will be performed in accordance with the appropriate NIOSH or OSHA method under the direction of an AECOM Technical Services Certified Industrial Hygiene (CIH). The proposed sample methods for this initial characterization monitoring are listed in Table 1-2.

Calculations to determine the 8-hour time weighted average (TWA) or ceiling concentration results will be performed as needed to allow for comparison to applicable OSHA Permissible Exposure Limits (PEL). All monitoring results will be available for review upon receipt from the laboratory.